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AUTHOR Brown, Alan F.
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ABSTRACT

In a study of some cognitive determinants of job satisfaction, attention was focused on the idiosyncratic way a teacher responds to being a teacher. It was hypothesized that subjective variables may have as much to do with improving individual morale as the traditional exhortative or manipulative approach. In a study of 45 teachers who described elements of work they found satisfying, rewarding, or stimulating as opposed to those they found dull, bland, or tedious, the teachers' stated quality of work life clearly favored those who were more resourceful in describing teaching and showed higher cognitive complexity. Also favored were those teachers who were more professionally literate and showed a higher level of cognitive awareness. (CB)

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COGNITION, CHARACTER AND QUALITY OF LIFE

Alan F. Brown

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COGNITION, CHARACTER AND QUALITY OF LIFE

Paper by Alan F. Brown, Ontario Institute for Studies in Education, to session 4.16, "Teacher Efficacy," of the annual meeting of the American Educational Research Association held in San Francisco, April 16-20, 1986

Summary

In this paper on some cognitive determinants of job satisfaction, attention is given to the idiosyncratic way a teacher responds to being a teacher. A practical reason is the possibility that subjective variables may have as much to do with improving individual morale as may the traditional exhortative or manipulative approach. In a study of 45 teachers who described elements of work they found satisfying, rewarding or stimulating as against the dull, bland or tedious, their stated quality of work life clearly favoured those who (a) were more resourceful (showed higher cognitive complexity) in describing teaching and, generally, who (b) were more professionally literate (higher level of cognitive awareness). This was so despite some who were not aware of what they were up to and liked it that way.

Overview

The title of this paper is deliberately presumptuous for it connotes the possible implications of the findings more than the initial intent of the study. In the study the purpose was to gather idiosyncratic information on what makes teaching interesting. Thus it was a study of the subjective elements of morale, job satisfaction, organizational climate or vibes.

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The theoretical setting certainly is not intended to reject the environmental determinants of organizational dynamics. The environmental, situational, demographic and administrative effects upon the quality of life experienced in the workplace have been thoroughly and understandably studied, with interesting and informative results. Rather, and for that same reason, this study was intended to look inwardly, into the subjectifications of the joys and drags of being a teacher.

Findings from such a study can be useful both to administrators designing staff programs and to organizational theorists seeking to discover conceptual links with the workplace. That is, if one were to plan a professional development activity or staffing arrangement with at least some purpose of making people feel better at work, then it would be helpful to know whether subjectivities mattered and, if so, whether anything could be done about it. On the other hand, organization theory may be helped by some attention to the possible connection between the way one thinks and the way one feels.

In this study, just such a possibility is put ot the test: that a teachers' self-professed feelings about job satisfaction are clearly and positively related to that same teacher's own cognitive structures. How they feel about the quality of their work life may be a function of how they differentially construed it so that those more imaginatively resourceful and those more conceptually integrated may be inclined to report high job satisfaction. The reverse may also be true. The possible implication, thought not the intent, that character-laden attributes such as resourcefulness and integrity and, to some extent, discernment and dependability are strong determinants of quality of life, is quite tempting.

Is there anything to be done about a study that can be seen ending up with the capricious connotation that quality of work life "is all in your head"? Perhaps there is. Whereas manipulating the environment on the one hand, and exhortations on the

other have done little to affect organizational dynamics, the possibilities of effecting growth and development in cognitive complexity (above: resourcefulness) and level of cognitive awareness (above: integration) on other related administrative problems are much more encouraging. This optimism is based on the results of previous projects carried out by our group[1], even though those projects had more to do with administrative promotions and teacher selection skills. The present study is directed toward effecting change in organizational dynamics through cognitive development.

Setting

What does make teaching so interesting? It seems to be a vocation that attracts people away from other activities including those like meteorology, pharmacy and aerospace engineering that themselves would appear to be quite exciting. Does it attract and hold people of particular interests or create interest in the dullest of us? Teaching has been called the one vocation one can also make one's avocation. In this paper there is a brief look at the how and the what of teacher thinking about what makes teaching interesting, that is to say their thinking into the quality of their work life.

Quality of life, or when referenced to the workplace, quality of work life (QWL), is of current interest particularly in management literature and research. Perhaps the interest arises out of the age old evidence that it's cheaper to make a person feel good than to raise pay. Whether or not either does affect output matters less in the more professional levels of management and in the public service sector including teaching because in these tasks, quality of work life itself becomes an output. If it's no place for you, you change it, exit, or learn to put up with it one way or another. Thus quality of work life as experienced by the teacher

becomes as major a purpose of the principal as did its earlier counterparts: dedication, organizational climate, commitment, morale, spirit, atmosphere, feeling tone, vibes.

Designing a program to improve the quality of work life, whether for an insurance company or a school system, has engaged the attention of consultant and researcher alike. In times of economic restraint, university underfunding and the reticent marketplace, it seems that any plan that looks promising is worth the attempt. Unfortunately this is usually not so. What may look promising appears so because its attention is directed more to conditions of the workplace than to the worker. The workplace is visible, is objective. The worker's intentions, wills, feelings are idiosyncratic, are subjective. Being less visible becomes seen as less accessible so why waste the effort. Accordingly, the design of programs, e.g. to create "excellence" so as to become known as the excellent school system,[2] are a mix of exhortatives, unrealistic universals and high-level platitudes.

What this paper will report is one attempt to direct attention inwardly, to the subjectivity of morale, to isolate one or two of the several idiosyncratic determinants of how one experiences quality of life as one works as a teacher. That is, it will apply what we now call "teacher thinking" to the question of what it is that makes teaching interesting, lively, exciting or sometimes tedious and draining.

A Structure for Thoughts Behind Actions

The question of how one can discover what teachers think, or even how teachers think, whether about morale or any other topic presumes that, yes, one can. This is the initial presumption of this paper. My way of doing it is guided by some thoughts about the process of reflecting. That is, the activity called reflecting is thought of as a means for developing a clear grasp of the reality of one's workplace, for

developing greater resourcefulness at approaching this reality, and for adjusting or fine-tuning some of our preconceptions about that reality. Thus the attempt, for this paper, was to develop a situation for structured reflection.

Structured reflection is a term that has been used to describe some of my previous work trying to set out teacher's definitions of teacher effectiveness, teacher promotability and the like. These are personnel decisions. In these studies[3] it was discovered that it is not at all unusual for persons to have two quite different sets of definitions of the situation, the posted set and the operational set. The posted ones are those which we post as upon a billboard, to see and to be seen. The operational ones on the other hand are the ones which we actually are using, know it or not, as the tacit or implicit guides to our thoughts and actions.

There are three classes of posted constructions of reality, we have found so far. There are some posteds that are our ideals, some that are our thoughts-in-abstraction and some are outright lies, or perhaps at least our attempts at being diplomatic.

Taken in order, the ideals, or the first class of posted constructs, are the should-be's, or the ought-to-be's[4] so that it is not at all discouraging to find posted definitions differing from the operational, that is those definitions that are inferrable directly from our actions, or the "are's." When there is this discrepancy within our thinking it is perhaps a recognition that your reach must exceed your grasp (or what's a heaven for?). The chasm between the ideal and the real always seems to widen when you get grand visions of the possible but settle interimly at least on the mundane actual.

Posted definitions of a situation may also however be nothing more than our reflection-in-abstraction. Thus our second class of posted constructs are when we reflect first upon some abstract idea rather than upon an actual event; we have an

arm-chair theory of reality in which we may actually claim to believe. This happens not so much because we are out of touch with reality as because we fail to attend to our own involvement within reality.

An example of the incongruity that may develop between a person's posted constructs which are reflection-in-abstraction and that same person's operational constructs--the ones actually in use at the time--is seen in the supervisor who stands and exhorts all teachers, every one of them in the very same way, to "individualize instruction." The possible contradiction between what is said and what is done is apparent only to the listener. This contracticton happens easily in administration so that one finds a superintendent waxing eloquently over a fascination with the intricately complex matrix of programs he/she has just drawn up for teachers' professional development, i.e. the growth of real live people. The necessary preoccupation with the processes for working with people comes to take precedence over the very people they were supposed to be about. The people get posted, the process prevails.

The third class of posted constructs is quite different. Whether it is called diplomacy, persuasion, salesmanship, hypocrisy or just spinning lies, they all require you to know what you are up to and why. The teacher who claims to post that kids come first and then breaks a leg trying to beat them out of school at four o'clock (yes, one did but it was an icy Edmonton January) is an example. This is quite different from the second class of posted constructs; it is the difference between the smart hypocrite and the ignorant hypocrite: the former knows that he's lying, the latter does not and is therefore a dangerous phony.

It is now possible to suggest that all of us have different levels of what can be termed "professional literacy," that is our ability to articulate in some meaningful set of symbols, including language, the nature of our professional

experience and what we do with it. On some matters it may be more convenient to use the symbols at hand than reflect more closely or critically.

The notion of professional literacy deals mostly with the second class of posteds and their degree of correspondance to the operational sets. It is conveniently similar to what G. A. Kelly calls "level of cognitive awareness."[5] At a low level of cognitive awareness, a person is dealing with elements that lie at the outer extremeties of the range of convenience of his available constructs, so that the opportunities for validation or invalidation of those constructs is minimized. Perhaps that's a good thing, not being able to see your own errors. But this person, says Kelly, "cannot be very keenly aware of what he is up to."

A high level of cognitive awareness could be thought of as the descriptor for persons whose constructs of what they are up to are indeed what it actually is that they are up to. Their thoughts and actions are integrated; they exhibit "integrity" in at least the conceptual sense. Similarly their priorities would correspond so that the constructs they <u>demonstrate</u> to be "of most importance" to the quality of their work life would, at perhaps some other time, be the same as the constructs they would upon reflection <u>claim</u> to be "of most importance." If you keep saying (even to yourself) that 'working with people' is the most important thing that makes teaching interesting, then it should follow that 'working with people' ought to be a construct that would differentiate strongly between those elements of your work you choose as interesting and those that are dull. You would then have a "high level of cognitive awareness" or perhaps get called "professionally literate" or even demonstrate integrity.

Thus the first question I wish to pose here is whether the level of one's cognitive awareness, or professional literacy, is a cognitive determinant of feelings of job satisfaction, itself related to sense of quality of work life. The question

would seem to call for a linear relationship. The lower the level, the less chance there is for validation of your ruminations about work and thus the less likely you are to find the workplace satisfying. The higher the level, the more frequently you have been able to check back successfully and build new thoughts about the place. Thus you can come to feel better about it.

But there is a curious reversal implied here: does this process of reflecting end up with you actually building more thoughts about your professional environs, or is it the other way round? If you do possess more resourcefulness, more well organized distinct and separate notions about the way it is at work, was this because of the higher level of cognitive awareness or the reverse? And, what is more important now, can it be considered as another cognitive determinant of quality of work life?

The answer to this question begs the theory of cognitive complexity.[6] According to this, the greater your cognitive complexity the more ably you cope with the tasks at hand. Many operational definitions of cognitive complexity now abound but the simplest estimate allowable would be your resourcefulness, or the number and variety of constructs you possess and are able to draw upon to confront a topic. In earlier studies[7] on developing school principals' ability to make effective staff decisions, e.g. for recommendations for promotion or selection, we found a wide range in their repertoire of operative criteria. Despite what they said or posted on the topic, some principals found their repertoires of operative criteria would be quickly exhausted when actually making selections among available candidates. They had to resort to repetitions or synonyms. On the other hand were the more discerning principals who could keep on finding unique characteristics in their candidates; they were thus able to make more sophisticated choices for more specific purposes. They had greater cognitive complexity.

The concept of cognitive complexity means being more resourceful, or having more strings for your bow when attacking a problem or reflecting on reality. Parry[8] found the more effecting principals used a significantly greater number of criteria than did those less effective; their superintendents had still more. Cognitive complexity also refers to construct interrelatedness but, because these two measures were once found to be highly correlated,[9] we will now use the simple number of different constructs demonstrated by a subject as a crude estimate of cognitive complexity. The question posed here is whether possession of this should turn out to bode well for the way you feel about your job, i.e. quality of work life. Again, a linear relationship will be looked for.

The Study

This study has three phases, one for each of the variables discussed above: (a) resourcefulness or estimate of cognitive complexity, (b) professional literacy estimated by level of cognitive awareness and (c) quality of work life. There were 45 experienced teachers and we met on several occasions in different groups in 1985. I did not consider that demographic variables such as age, gender or ethnicity, or what I elsewhere call the organizational statics,[10] should have any effect in a study of organizational dynamics. Indeed they did not. Probably other variables such as level of education and length of experience would not have had any effect either but the subjects studied were relatively homogenious on those variables. I knew these people well, had established rapport, and they responded with enthusiasm. This point I mention because of the crudity of some measures.

For resourcefulness or estimate of level of cognitive complexity, a variation of our discrimant perception repertory test (distantly related to Kelly's role construct repertory test[11] but without roles or poles) was devised. Elsewhere[12] is

reported several estimates of the reliability and validity of this instrument when used for personnel decisions and other purposes but none for job satisfacton. Because the format is quite similar and because our subjects were familiar with its personnel decision use, we infer its use to be sufficiently reliable and valid for the present.

The instructions given to my teachers this time were:

> Think of three elements of your work or workplace in which you are very interested, find stimulating or exciting, derive satisfaction or reward from, or make you want to stay with it or are otherwise a positive element in what you do and why you do it.
>
> These elements should now be identified below as Element A, Element B, Element C. Note that these elements may be any tasks, persons, challenges, groups, committees, staffs, work routines, events, duties, responsibilities, opportunities, good times, bad times with adults or children or both or neither so long as--to you at least--they are thought of as part of your work or somehow associated with it.
>
> Think of three elements of your work that are bland, dull, boring, tedious, irritative, annoying, uninteresting, a nuissance to bear, make you want to avoid it, cause bother or are otherwise a negative element in what you do and why you do it.
>
> Now enter these as Elements X, Y and Z below noting the same range of conditions as above.

The purpose of these instructions was to elicit a representative sample of the respondants' positive and negative elements about job satisfaction. Following these

instructions was a series of forced comparisons among these elements . There were 18 such comparisons, which exhausts the combinations of six elements taken three at a time, excluding the two homogenious sets. The intent of this instruction was to exhaust their repertoires of constructs attributable to these elements. Because my teachers were already familiar with this format, I allowed them to process their own protocols thus avoiding any problems of scorer verification. They counted out and wrote down the number of identifiable and distinct constructs that had been elicited. They did not count synonyms, antonyms or terms which to them at least were meant as such. Thus their count is a truer estimate of their number of contructs than would be expected from an outside scorer who may quite easily miss what, to the respondant, was a synonym or antonym. Thus an outside scorer could give exaggerated scores estimating cognitive complexity.

Their 18 constructs, understood at least to them, now became a simple 18-item Likert scale against which in turn each of the six elements was rated. Processing the protocol meant subtracting, for each construct, the summed weights of its X, Y, Z elements from its A, B, C elements, to arrive at an estimate of the power of that construct upon the critical decision made earlier: what makes teaching exciting and dull? This may be termed the decision power of each construct, showing its strength or weakness as a criterion for job satisfaction, at least for that idiosyncratic respondent. The respondent's complete set of criteria may now be compared to each other to show a scale of the priorities of their constructs, ranked according to the strength or weakness of each construct to discriminate between positive and negative environs at work.

An example is with one teacher who had used the term "satisfaction" as a powerful discrimator between elements: children, learning, holidays and elements: report cards, politics, timetables. With the same teacher "not flexible"

discriminated very weakly, i.e. was the weakest discriminator among her 10 constructs: flexibility didn't matter all that much. This teacher was using ten operational criteria which she now rank-ordered from 1st to 10th according to how strongly they contributed to her earlier decision about what makes quality in her work life.

The second phase of the study was approximately three weeks later, with no intermittant reference. The purpose was to obtain an estimate of what can be termed professional literacy which is similar to Kelly's level of cognitive awareness. The estimate is arrived at by making a simple comparison of a person's posted and operational criteria. It is done this way: from the foregoing first phase, each teacher was able to develop a scale of priorities among their operational criteria. They did this by rank-ordering their own criteria according to the decision power of each criterion. To arrive at a comparable scale of posted criteria requires a person to contemplate concepts-in-abstraction.

Contemplating concepts in abstraction is what we do all the time, whether reading journal articles or the daily newspaper. Making preferences among these concepts we also do regularly. That is particularly so of teachers, school administrators or others in helping professions. The larger problematic of this phase occurs when our concepts in abstraction come out-of-synch with our concepts in use; that happens when the abstractions become disconnected from that from which they were to have been abstracted: the real events, actual people, specific acts. Or perhaps some never were connected: like the pater noster, we acquired it in the abstract and kept it there.

It involves an inferential leap of perilous dimension to thrust the value-laden term "character" onto the innocent test-taker whose posted and operational definitions of reality happen to coincide. But then, for the son of a Presbyterian

minister, Kelly was admirably agile in keeping morals out of cognitive theory. Guilt, for example, is only that response to the discovery that what you did does not congrue with your set of personal constructs. So in this paper there is the assumption that the congruence of one's priorities in the abstract with their priorities as shown in actual behavior is an indication that they are integrated. Lack of cognitive integrity, or low level of cognitive awareness, simply means you "better smarten up."

The proceedure for this second phase was to give the teachers back their own lists of 18 statements. As a point of proceedure, the actual processing of the first phase, described above, was not completed until after the second phase so as not to contaminate the task. They were simply asked to:

> Read all your 18 statements and decide which of your criteria are most important to you and your work. Try to decide the relative importance to you of the effect on the quality of life at work of each of these 18 and rank-order them from 1st to 18th or from 1st to however many different criteria you have, not counting synonyms, antonyms.

This was not a memory-check. With the elements having been removed, they were studying attributive statements in the abstract, not identified directly with a concrete referent such as their six elements. The likelihood that these rankings of posted attributions would correspond to their earlier operationally-derived rankings of element-referenced attributions is the likelihood that the terms they talk about lie within their broad range of convenience, or are the operational ideas that they are easily able to articulate meaningfully. The likelihood they would not correspond is greater when the teacher has a lower level of cognitive awareness, has less

connection between ideas forced out of experience and terms taken off the shelf. That is, he is "less keenly aware of what he is up to." The correspondence between the two sets of rankings is the second variable.

For the third variable, quality of work life, the crude global estimate was used. This was sought on a different occasion. No claim can be made for its reliability although at that moment for that person it was probably a valid answer to the question of "where, on a scale of 1 to 10, would you place your own quality of work life?" I would like to have attempted this, which is the dependent variable here, in a more definitive fashion but was convinced none exists.

The Findings

How do we define "good" findings? If they turn out as predicted are they spurious? or tautological? faked? If they turn out the wrong way are they tentative? experimental? or wrong-headed? If somewhere in between are they only inconclusive? And perhaps do I avoid those answers by stating this study began without a hypothesis, either stated or implied?

Although this study never stated formal hypotheses, the main directions were clear enough and the findings are confirming: the bigger your resourcefulness or level of cognitive complexity, possibly the higher too is your correspondance between what you do and what you talk about (among school administrators: goal-directed behavior), and the better the both of these, the more likely you will be to find yourself sitting on a comfy cloud when it comes to estimating your quality of work life. There are exceptions and the N is too small for generalizations. Yet there is enough to encourage a more penetrating study of the inner dynamics that help to turn chaos into challenge or to make a nightmare just a nuissance. The encouragement seems to come from the cognitive nature of the determinants. The

encouragement lies not in the idiosyncratic nature of these determinants; it is encouraging because we are much more likely to be successful in changing cognitions than in working directly on people's wills and feelings.[13]

Table One sets out the summary of findings. No probability statements or levels of confidence are posted. But by eyeball analysis it is clear that the more strings to your bow, the more fun is the hunting. Self-estimates of quality of work life, with some exceptions, correspond strikingly with the number of identifiable personal constructs actually used (a few weeks earlier) in reflecting upon work. Less clear is the relation with estimates of the degree of integration of their posted and operational priorities, or their levels of cognitive awareness.

This ambiguity was cleared considerably during interviews with those showing anomalous results. Quite unexpectedly, these interviews turned up a couple of happy discoveries. First the general notion behind this study probably was accurate: that there does exist a sort of linear relationship between the way you feel about your vocation and the ways by which your cognitive processes are organized, particularly respecting (a) the breadth of your repertoire or means of construing teaching and (b) your degree of candor in articulating what is taking place. That confirmation was a little reassuring after noting all those anomalies from that general trend. More serendipitous however was the second discovery, the one that had them saying in effect, "we're quite happy with how we think we see things so don't confuse us with reality." This effect takes more considering.

In the last column of Table One, Anomalies, attention is drawn to those teachers whose results are "anomalous" to the general trend posited earlier. The As are anomalous in that they showed a high degree of cognitive awareness but a medium, low or very low estimate of quality of life. Their comments were the classic ones found in studies of worker satisfaction implying or stating "of course

Table One: 45 teachers grouped by self-estimates of quality of work life (QWL), measures of cognitive complexity (CCX) and level of cognitive awareness (LCA).

	No. in group	QWL		CCX*		LCA#		Anomalies
a.	(1)	10	v.high	12	high	11	high	B
b.	(2)	9	v.high	13	v.high	8	med.	
c.	(1)	8	high	14	v.high	11	high	
d.	(5)	8	high	11½	high	10	med.	
e.	(3)	8	high	10	h.med.	13	high	
f.	(2)	8	high	7	low	4	low	B
g.	(2)	8	high	6	v.low	10	med.	C
h.	(3)	7	med.	12	high	10	med.	
i.	(1)	7	med.	8	l.med.	12	high	A
j.	(5)	7	med.	9	med.	9	med.	
k.	(2)	7	med.	8	l.med.	5	low	
l.	(3)	6	med.	8	l.med.	10	med.	
m.	(2)	5	low	8	l.med.	12	high	A
n.	(1)	5	low	10	h.med.	9	med.	C
o.	(2)	5	low	7	low	13	high	A
p.	(4)	4	low	8	l.med.	6	low	
q.	(1)	4	low	7	low	12	high	A
r.	(2)	3	low	8	l.med.	6	low	
s.	(2)	3	low	6	v.low	5	low	
t.	(1)	2	v.low	10	h.med.	10	med.	A
possible range		1-10		1-8		1-14		

* number of different constructs used when comparing interesting/dull work elements

\# congruence of priorities within sets of posted-operative constructs

Anomalies:

As know very well what they are up to and claim that as a result their QWL could take improvement.

Bs are quite happy thank you with the way they see things now and show little desire to delve deeper.

Cs are a mix of personal hopes, problems, opportunities and temporary inconveniences.

we know the way it is and even if it's not that bad it could be very much better." The thinking of the "A" teachers is that of the hard-headed idealist who, without any cognitive disjunction, lives with realistic visions of improvement. What would a staff be without the divine discontent?

The Bs comments however were to the contrary and equally believable. These teachers all displayed, if not quite the classic "bovine contentment," at least an equanimity with reality and a willingness to accept cognitive disjunctions as part of the taken-for-granteds of life in complex organization especially schools with its comings and goings of unpredictable people.

The Cs remind us against temptations to go running gleefully into predicting personal behavior. With one the temporary accommodations were depressing, another's career directions were at crossroads with deadends both ways, others had personal interests that overrode professional contemplations. The intent is not to predict but to attend more closey to the subjectivities of organizational dynamics. Understanding that is not a means but, as Stogdill liked to point out in detail,[14] is an administrative end-in-itself.

Looking at the substantive content of teacher thinking, instead of at its structure, results in Table Two. In this table are presented a few examples of those things our teachers found interesting or dull, and why. For these teachers, these are their operational definitions. The "elements" are the things that make teaching interesting or the opposite. The constructs are the attributes, the reasons why they are so. The teachers are arranged in the same sequencing of groups as in Table One. Thus in group "o" is a teacher named Fred, an "A" anomaly in Table One, whose ranking of his own abstract constructs corresponded highly with their operational power on the grid (highly aware of his own constructs) yet whose estimate of quality of work life was very low. Fred knows what he is up to, is a

Table Two: Examples of what is interesting/dull about teaching (elements) and why (constructs) from 45 teachers grouped as in Table One.

	Examples +/- Elements	Examples +/- Constructs
a.	sincerity of kids	personal attributes
	stagnant peers	can't be changed
b.	working with people	interpersonal rewards
	uncommitted people	irritating
c.	coaching sport team	relationships developed
	trustees	no control over them
d.	exciting ed. activity	challenging
	routines	like a monkey on my back
e.	holidays	stimulating
	staff meetings	time consuming
f.	students	dealing with people
	hall patrol	repetitive
g.	independence	self-direction
	authority decisions	lack meaning
h.	staff room conversations	deal with people
	sudden schedule changes	no control
i.	words of praise	feeling of self worth
	yard duty	boring, tedious
j.	children	exciting
	report cards	necessary evil
k.	committee work	chance for my improvement
	repetitive tasks	no interpersonal fun
l.	interaction with kids	fills an emotional need
	paperwork	tedious
m.	interesting activities	trust, harmony
	routines	absence of variety
n.	can immerse myself	feel professional
	time getting to work	unproductive
o.	guiding aspect	requires good example
	need to push staff	needs encouragement
p.	prestige of power	challenging
	marking, grading	stultifying
q.	consulting activities	hard work
	commuting	time consuming
r.	students	delighted
	lunch duty	annoying
s.	receive attention	makes you feel good
	they don't get the facts	time consuming
t.	sincerity of kids	personal attributes
	stagnant peers	can't be changed

hard worker and very active in his church. What he likes about teaching, in Table Two, is its guiding aspect; he does not like needing to push other staff members. Why he likes it, in Table Two, is because this guiding aspect requires him to set a good example. Don on the other hand as line "c" has high cognitive awareness, high cognitive complexity and high quality of work life. He especially finds rewarding the personal relationships developed through coaching a sports team and is frustrated by school board trustees because he has no control over them (note, as compared with his team members).

Going through this table in this fashion provides a picture of the personal satisfaction from working productively with children and adults, gaining opportunities for self development and recognition and the attractions of variety, challenge, creativity and, yes, holidays. These run counter to a wide variety of chores that must be done somehow by somebody but are seen as contributing little to the purpose of their profession. Staff meetings, hall patrol, yard duty, paperwork, commuting, futile trustees and meaningless decisions do not enrich the essence of good teaching. But of a different order are grading, marking notes, paperwork, report cards and the need to work with unmotivated colleagues who misconstrue the facts. These and similar negative elements present problems that are still seen as indigenous to the profession yet detract from its quality.

Table Two helps to re-emphasize the finding that personal constructs underly satisfaction[15] but tells us nothing unfamiliar about the content of these constructs. What was unfamiliar was the structural link.

The purpose of this paper however was not to identify or propose some new way of making teaching more exciting. Teachers do that themselves. Indeed from what we see, it is that the highly resourceful professionally literate will enjoy teaching more and if not they will know why not. Teachers, it seems, have within

themselves the capacity for creating new ways of arranging or construing what they do. This is a humanistic notion both assumed in this study and borne out in others, particularly when facilitated through the process of reflection. Guided reflection, or the structuring of an unstructured activity is the process whereby when persons become more aware of what is they do and how they do it, individually and with their peers and colleagues, they can come up with practices, programs and policies that are every bit as good as those prescribed by management or management textbooks. Probably they will be better because of the immediacy of insight and the likelihood of enactment.

Endnotes

1 see Interchange 13/4, 1982, a theme number edited by A. F. Brown and T. J. Ritchie including several reported studies.

2 as inspired by T. J. Peters and R. H. Waterman In Search of Excellence, New York: Harper & Rowe, 1982.

3 A. F. Brown, "How to change what teachers think about teachers: affirmative action in promotion decisions," in R. Halkes and J. K. Olson, eds., Teacher Thinking. Lisse, Holland: Swets and Zeitlinger, 1984, 197-209.

4 c.f. Angelika C. Wagner, "Conflicts in consciousness: imperative cognitions can lead to knots in thinking," in R. Halkes and J. K. Olson, op. cit., 163-175.

5 G. A. Kelly The Psychology of Personal Constructs, New York: Norton, 1955, vol. 1, 475-476.

6 an early development of this now widely-used concept was by James Bieri, "Cognitive complexity-simplicity and predictive behavior," Journal of Abnormal and Social Psychology 51:2, 1955, 263-268.

7 e.g. Elizabeth Ann Rix, "Dynamics of promotion decisions," Comment on Education, 12:1, 1981, 4-12, or A. F. Brown, "A perceptual taxonomy of the effective-rated teachers," chap. 3 in D. Gerwin, ed., The Employment of Teachers, Berkeley: McCutchan, 1974, 41-65.

8 Robert Parry, "Elementary school principal effectiveness: perceptions of principals and superintendents," unpublished Ed.D. thesis, University of Toronto, 1978.

9 A. F. Brown, "Exploring personnel judgements with discriminant perception analysis," Proceedings of the third Canadian conference on educational research, (Ottawa: Canadian Council for Research in Education, 1964), 229-238.

10 A. F. Brown, "Reactions to leadership," Educational Administration Quarterly, 3:1, 1967, 62-73.

11 in G. A. Kelly, op. cit.

12 see Interchange 13/4, pp. 17-18.

13 professional development projects resulting in an increase in number of personal constructs over the time of the project are reported in Rix, op. cit., Brown Interchange op. cit. and Teacher Thinking op. cit. An interesting example is Elizabeth Hill (Rix) "Understanding the disoriented senior as a personal scientist: the case of Dr. Rager" (in F. Fransella and L. Thomas, Personal Constructs, Rutledge & Kegan Paul, in press) where three months of intensive personal attention brought back an older man's constructs, poetry and will.

14 R. M. Stogdill, Managers, employees, organizations. Columbus: Ohio State University, 1965.

15 D. L. Blackshaw, "Personal constructs underlying satisfaction." Unpublished Ph.D. thesis, University of Oregon, 1982.